AMENDMENTS TO THE CLAIMS

A marked-up version of the claims that will be pending following entry of the present amendments is listed below. Matter that has been deleted from the claims is indicated by strikethrough and matter that has been added is indicated by underlining. This listing of claims replaces all prior versions of claims in the application.

1. (**Currently amended**) An isolated single-cell bipotent hepatic progenitor which

(a) expresses at least one intercellular adhesion molecule (ICAM) antigen;

(b) does not express major histocompatibility complex (MHC) class Ia antigen[[,]]; and

(c) exhibits at least one of the following characteristics: (1) expression of at least one of CD44H, alpha-fetoprotein, albumin or CK19, or (2) dull expression of a nonclassical MHC class Ia antigen, or (3) higher side scatter (SSC) relative to non-parenchymal cells as measured in a flow cytomerter;

in which the bipotent hepatic progenitor has a capacity to differentiate into a hepatocyte or a biliary cell when exposed to differentiation-inducing growth conditions.

2.-13. (**Canceled**)

14. (**Currently amended**) An isolated single-cell hepatic progenitor in which the hepatic progenitor:

(a) expresses at least one MHC class Ib antigen;

(b) exhibits a numerically higher sidescatter value determined by flow cytometry than the sidescatter value of nonparenchymal cells of the same species;

(c) expresses alpha-fetoprotein, albumin, CK 19, or combinations thereof; and

(d) wherein the hepatic progenitor is capable of differentiating into a hepatocyte or a biliary cell when exposed to differentiation-inducing growth conditions.

15.-26. (**Canceled**)

27. **(Currently amended)** A composition consisting essentially of isolated single-cell bipotent hepatic progenitors which (a) express at least one intercellular adhesion molecule (ICAM) antigen;

(b) do not express major histocompatibility complex (MHC) class Ia antigen[[,]]; and

(c) exhibit at least one of the following characteristics: (1) expression of at least one of CD44H, alpha-fetoprotein, albumin or CK19, or (2) dull expression of a nonclassical MHC class Ia antigen, or (3) higher side scatter (SSC) relative to non-parenchymal cells as measured in a flow cytomerter;

in which the bipotent hepatic progenitors have a capacity to differentiate into hepatocytes or biliary cells when exposed to differentiation-inducing growth conditions.

28. (**Currently amended**) A composition consisting essentially of isolated single-cell hepatic progenitors in which the hepatic progenitors:

(a) express at least one MHC class Ib antigen;

(b) exhibit a numerically higher sidescatter value determined by flow cytometry than the sidescatter value of nonparenchymal cells of the same species;

(c) express alpha-fetoprotein, albumin, CK 19, or combinations thereof; and

(d) wherein the hepatic progenitors are capable of differentiating into a hepatocytes or biliary cells when exposed to differentiation-inducing growth conditions.

29. **(Currently amended)** A composition comprising a population of isolated single cells enriched in bipotent hepatic progenitors which (a) express at least one intercellular adhesion molecule (ICAM) antigen;

(b) do not express major histocompatibility complex (MHC) class Ia antigen[[,]]; and

(c) exhibit at least one of the following characteristics: (1) expression of at least one of CD44H, alpha-fetoprotein, albumin or CK19, or (2) dull expression of a nonclassical MHC class Ia antigen, or (3) higher side scatter (SSC) relative to non-parenchymal cells as measured in a flow cytomerter;

in which the bipotent hepatic progenitors have a capacity to differentiate into hepatocytes or biliary cells when exposed to differentiation-inducing growth conditions.

30. (**Previously presented**) The composition of claim 29 in which the bipotent hepatic progenitors express at least one MHC class Ib antigen.

31. (**Previously presented**) The composition of claim 30 in which the MHC class Ib antigen is weakly expressed in comparison to expression of ICAM as indicated by a dull positive response to immunostaining with fluorescent anti-MHC class 1b antibody in comparison to a positive response to immunostaining with anti-ICAM antibody.

32. **(Previously presented)** The composition of claim 29 in which the ICAM antigen is ICAM-1.

33. **(Previously presented)** The composition of claim 29 in which the hepatic progenitors have a sidescatter value determined by flow cytometry which is numerically less than the sidescatter value of mature parenchymal cells of the same species.

34. **(Previously presented)** The composition of claim 29 in which the hepatic progenitors have a sidescatter in flow cytometry which is between the sidescatter of nonparenchymal cells of the same species and the sidescatter of mature parenchymal cells of the same species.

35. **(Previously presented)** The composition of claim 29 in which the hepatic progenitors are capable of dividing and giving rise to progeny.

36. **(Previously presented)** The composition of claim 35 in which the hepatic progenitors exhibit a capacity for clonal growth.

37. **(Previously presented)** The composition of claim 36 in which the clonal growth requires extracellular matrix.

38.-40. **(Canceled)**

41. **(Previously presented)** The composition of claim 40 in which the hepatocytes or biliary cells additionally express a cell adhesion molecule that can be used for selection or identification of a particular subpopulation.

42. **(Currently amended)** A composition comprising a population of isolated single cells enriched in hepatic progenitors in which the hepatic progenitors:

(a) express at least one MHC class Ib antigen;

(b) exhibit a numerically higher sidescatter value determined by flow cytometry than the sidescatter value of nonparenchymal cells of the same species;

(c) express alpha-fetoprotein, albumin, CK 19, or combinations thereof; and

(d) wherein the hepatic progenitors are capable of differentiating into hepatocytes or biliary cells when exposed to differentiation-inducing growth conditions.

43. **(Previously presented)** The composition of claim 42 in which the hepatic progenitors are derived from endoderm or bone marrow.

44. **(Previously presented)** The composition of claim 43 in which the endoderm is selected from liver, pancreas, lung, gut, thyroid, gonad, or combinations thereof.

45. **(Previously presented)** The composition of claim 43 in which the progenitors express ICAM antigen.

46. **(Previously presented)** The composition of claim 45 in which the ICAM antigen is ICAM-1.

47. **(Previously presented)** The composition of claim 43 in which the progenitors do not express MHC class Ia.

48. **(Previously presented)** The composition of claim 43 in which the progenitors weakly express at least one MHC class Ib antigen in comparison to expression of ICAM as indicated by a dull positive response to immunostaining with fluorescent anti-MHC class 1b antibody in comparison to a positive response to immunostaining with anti-ICAM antibody.

49. **(Currently amended)** A cell culture comprising a population of single-cell bipotent hepatic progenitors that

(a) express at least one intercellular adhesion molecule (ICAM) antigen;

(b) do not express major histocompatibility complex (MHC) class Ia antigen[[,]]; and

(c) exhibit at least one of the following characteristics: (1) expression of at least one of CD44H, alpha-fetoprotein, albumin or CK19, or (2) dull expression of a nonclassical MHC class Ia antigen, or (3) higher side scatter (SSC) relative to non-parenchymal cells as measured in a flow cytomerter;

in which the bipotent hepatic progenitors have a capacity to differentiate into hepatocytes or biliary cells when exposed to differentiation-inducing growth conditions.

50. **(Previously presented)** The cell culture of claim 49 further comprising extracellular matrix.

51. **(Previously presented)** The cell culture of claim 50 in which the extracellular matrix comprises collagen, fibronectin, laminin, or combinations thereof.

52. **(Previously presented)** The cell culture of claim 50 further comprising feeder cells.

53. **(Previously presented)** The cell culture of claim 52 in which the feeder cells are fibroblast cells.

54. **(Previously presented)** The cell culture of claim 52 in which the feeder cells are embryonic or fetal cells.

55. **(Previously presented)** The cell culture of claim 50 further comprising a serum-free culture medium.